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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--------------------------|-------------|----------------------|----------------------|------------------|
| 09/997,019 | 11/28/2001 | John Whitman | 4294.2US (98-1208.2) | 6139 |
| 24247 | 7590 | 05/10/2004 | EXAMINER | |
| TRASK BRITT | | | KEBEDE, BROOK | |
| P.O. BOX 2550 | | | ART UNIT | |
| SALT LAKE CITY, UT 84110 | | | PAPER NUMBER | |
| | | | 2823 | |

DATE MAILED: 05/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------|--------------------------------------|---------------------------------------|--|
| Advisory Action | Application No. 09/997,019 | Applicant(s) WHITMAN ET AL. | |
| | Examiner Brook Kebede | Art Unit 2823 | |

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 23 April 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.

b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.

2. ☐ The proposed amendment(s) will not be entered because:

(a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);

(b) ☐ they raise the issue of new matter (see Note below);

(c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or

(d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____.

3. ☐ Applicant's reply has overcome the following rejection(s): _____.

4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

5. ☒ The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: (See the attachment).

6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.

7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☐ will not be entered or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____.

Claim(s) objected to: _____.

Claim(s) rejected: 1-22.

Claim(s) withdrawn from consideration: _____.

8. ☐ The drawing correction filed on _____ is a) ☐ approved or b) ☐ disapproved by the Examiner.

9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____.

10. ☐ Other: _____

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Continuation Sheet (PTO-303)

Advisory Action

1. On cursory consideration, the request for reconsideration does not clearly appear to overcome the rejections.

Response to Arguments

2. Applicants' arguments filed on April 24, 2004 have been fully considered but they are not persuasive.

Applicants argued that "Wang lacks and express or inherent description of spreading a second material over the first material layer so as to form a second material layer having a planar surface..."

In response to the applicant's argument, the examiner respectfully submits that Wang '932 discloses all the claimed limitations as applied in Paragraph 2 of the Office action that was mailed on February 19, 2004. As shown Fig. 4d, Wang '932 teaches a forming of a planar second material **60** (i.e., smoothing layer) over the first material **56** (i.e., dielectric layer). Wang '932 also discloses smoothing layer is formed by spin coating, i.e., similar process that used in the instant application to planarize smoothing layer (see Col. 6, lines 52-64). Furthermore, one of ordinary skill in the art recognizes that second material **60** has a planar surface because spin coating process is a well-known process in the art to form planar surface and Wang '932 also explicitly teaches the planarization process (i.e., spin coating) that resulted planar surface of the second material **60** layer as depicted in Fig. 4d. In addition, the limitation claims 2, 6, 7, and 10-22 are also anticipated by Wang '932. Therefore, the rejection under 35 U.S.C. 102 is deemed proper.

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With respect to applicants argument claims rejection under 35 U.S.C. 103 (i.e., Wang '932 and Yoshihara '486) applicants argued that "As a result, the smoothening layer 60 would be as nonplanar as the underlying dielectric layer 56. Therefore, it appears that any motivation to combine the teachings of Yoshihara and Wang in the manner that has been asserted could only have been improperly gleaned from the subject matter described in the above-referenced application..."

In response to the applicant's argument, the examiner respectfully submits that Wang '932 and Yoshihara '486 in combination disclose all the claimed limitations as applied in Paragraph 4 of the Office action that was mailed on February 19, 2004.

Both Wang '932 and Yoshihara '486 teachings are directed to coating of material on a substrate for purpose of fabrication of semiconductor device. Therefore, the teachings of Wang '932 and Yoshihara '486 are analogous. It would have been within the scope of ordinary skill in the art to combine the teachings of Wang '932 and Yoshihara '486 in order to modify spin coating of Wang '932 by adjusting the spinning rate (rpm) according to the teachings of Yoshihara '486 because one having ordinary skill in the art would have been motivated to look to analogous art teaching alternative suitable or useful methods performing of the spin coating process of Yoshihara '486 and the art recognized suitability for an intended purpose. Therefore, the reason to combine Wang '932 and Yoshihara '486 is directly came from reference, and therefore, the art recognized suitability for an intended purpose. Thee *prima facie* case of obviousness has been met and the rejection under 35 U.S.C. § 103 is deemed proper.

Further, in response to applicants' argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight

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reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

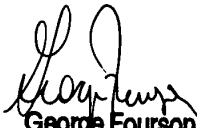
Correspondence

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brook Kebede whose telephone number is (571) 272-1862. The examiner can normally be reached on 8-5 Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Olik Chaudhuri can be reached on (571) 272-1855. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BK
May 3, 2004


George Fourson
Primary Examiner